Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (currently amended) A physiological medium which comprises an aqueous solution in sterile purified water of:
- (i) a salt component comprising:
- (a) from 100 to 150 mmoles/L of sodium ions,
- (b) from 2.5 to 6.2 mmoles/L of potassium ions,
- (c) from 0.1 to 2.5 mmoles/L of calcium ions,
- (d) from 0.4 to 25 mmoles/L of magnesium ions, and
- (e) from 96 to 126 mmoles/L of chloride ions;
- (ii) a buffer component comprising
- (f) from 21 to 27 mmoles/L of bicarbonate ions, and
- (g) from 1 to 12 mmoles/L of TES, MOPS or BES;
- (iii) a substrate component comprising:
- (h) 2 to 11 mmoles/L of glucose,
- (i) 50 to 150 µmoles/L of glycerol and
- (j) 7 to 15 μmoles/L of choline;
- (iv) an amino acid component comprising:
- (k) 5 to 400 μmoles/L of glutamate,
- (1) 5 to 200 μmoles/L of aspartate and
- (m) 100 to 2000 µmoles/L of glutamine;
- (v) a co-enzyme component comprising:
- (n) 1 to 120 nmoles/L of thiamine eocarboxylase pyrophosphate;
- (vi) a vitaminoid component comprising:
- (o) 40 to 70 µmoles/L of D- or DL- or L-carnitine;
- (vii) a protein component comprising:
- (p) 5 to 200 m I.U./L of porcine or human insulin; and.

2412616 -4-

- 2. (currently amended) A<u>The</u> physiological medium as claimed in claim 1 which <u>further</u> comprises
- (viii) an antibiotic component comprising:
- (q) 10 to 150 mg/L of chloramphenicol.
- 3. (currently amended) A The physiological medium as claimed in Claim 1 wherein the salt component comprises:
 - (c) from 1.0 to 2.5 mmoles/L of calcium ions, and
 - (d) from 0.4 to 2.4 mmoles/L of magnesium ions.
- 4. (currently amended) A The physiological medium as claimed in claim 1 wherein the salt component comprises
 - 135.32 mmoles /L of sodium ions, 5.00 mmoles /L of potassium ions, 1.25 mmoles /L of calcium ions, 0.45 mmoles /L of magnesium ions, as chloride salts, and 118.40 mmoles /L of chloride ions as sodium, potassium, calcium and magnesium salts.
- 5. (currently amended) A-The physiological medium as claimed in claim 1 wherein the buffer component comprises 25.00 mmoles /L of bicarbonate ions as sodium salt and 5.0 mmoles /L of N,N-bis (2-hydroxy ethyl)-2-amino-ethanesulfonic acid (BES).
- 6. (currently amended) <u>A-The physiological medium as claimed in claim 1 wherein the substrate component comprises 10 mmoles /L of D-glucose, 110 μmoles /L of glycerol and 10.0 μmoles /L of choline as the chloride salt.</u>
- 7. (currently amended) A-The physiological medium claimed in claim 1 wherein the amino acid component comprises 300 μ moles /L of L-glutamate as sodium salt, 20 μ moles /L of L-aspartate as sodium salt and 400 μ moles /L of L-glutamine.

2412616 -5-

- 8. (currently amended) A-The physiological medium claimed in claim 1 wherein the co-enzyme component comprises 40.0 nmoles /L of thiamine as thiamine pyrophosphate ehloride.
- 9. (currently mended) A<u>The</u> physiological medium as claimed in claim 1 wherein the vitaminoid component comprises 50.0 gmoles/L μmoles/L of -p-hydroxy-γ-trimethylaminobutyrate hydrochloride (L-carnitine).
- 10. (currently amended) A The physiological medium as claimed in claim 1 wherein the protein component comprises 28.0 m. I.U./L of recombinant human insulin (expressed in E.coli).
- 11. (currently amended) A<u>The</u> physiological medium as claimed in claim 1 wherein the antibiotic component comprises 100 mg/L of D-theo-2-dicWoroacetamide-I-(p-nitrophenyl)-1,3-propane acid (chloramphenicol) <u>D-theo-2-dichloroacetamide-I-(p-nitrophenyl)-1,3-propane acid (chloramphenicol)</u>.
- 12. (currently amended) A-The method for producing a physiological medium according to claim 1 which comprises adding in the following order: sodium chloride, potassium chloride, calcium chloride, magnesium chloride, the TES, MOPS, or BES, thiamine pyrophosphate, carnitine, choline, glycerol, insulin, aspartate, glucose, glutamate, glutarnine, and sodium bicarbonate to sterile purified water, with constant stirring, making up to the desired volume, filtering and storing in sterile sealed vessels.
- 13. (currently amended) <u>The concentrates</u> <u>Concentrates</u> for the preparation of a physiological medium as claimed in claim 1 which comprise the salt, buffer, substrate, amino acid, co-enzyme, vitaminoid and protein components, and dilutable with sterile purified water to form said physiological medium.
- 14. (currently amended) <u>The concentrates Concentrates</u> for the preparation of a physiological medium as claimed in claim 1 which comprise the salt, buffer, substrate, amino acid, co-enzyme, vitaminoid and protein components, except for sodium bicarbonate, and

2412616 -6-

dilutable with sterile purified water with the addition of sodium bicarbonate to form said physiological medium.

15. (new) The physiological medium as claimed in claim 10 wherein the recombinant human insulin derived from expression in *E.coli*.

2412616 -7-